ACCESSION NR: AT4036057

tutes a coaxial copper chamber (inside and outside diameters 1.6 and 12.5 cm respectively, length 180 cm) placed in a homogeneous magnetic field that can be regulated from 0 to 20 A/m and in a radial electric field produced by capacitor bank of 1050 μF connected to the system through a discharge gap and six coaxial cables. The vacuum in the system was 1.33×10^{-4} n/m^2. Oscillograms were taken of the waveform of the plasma voltage, of the capacitor and short-circuit currents, of plasma-diamagnetism signals from a probe located in the working volume, and of the time dependence of the light, obtained with a photomultiplier. The results show that a plasma rotating in crossed electric and magnetic fields has many advantages over a plasma produced by other means. A rotating plasma can be retained for several hundred microseconds at densities on the order of 10^{15} cm^{-3} and high degree of ionization (~30%). The confinement time (650--1000 μsec) agrees well with the time of penetration of the magnetic field due to the azimuthal current through the chamber wall (~1000 μsec). It is therefore proposed that the plasma confinement

Card   2/4

ACCESSION NR: AT4036057

time is determined under these conditions essentially by the time
of penetration of the magnetic field through the chamber wall. If
this factor turns out to be decisive, then the penetration time of
the field can be increased by increasing the wall conductivity and
the wall thickness. The former can be done by cooling the chamber,
but the latter entails attenuation of the field at the chamber
walls. Experiments are continuing in this direction since an es-
timate indicates that the penetration time of the magnetic field
through the chamber wall can be increased by three orders of magni-
tude. Orig. art. has: 6 formulas and 6 figures.

ASSOCIATION: None

SUBMITTED: 00   DATE ACQ: 21May64   ENCL: 01
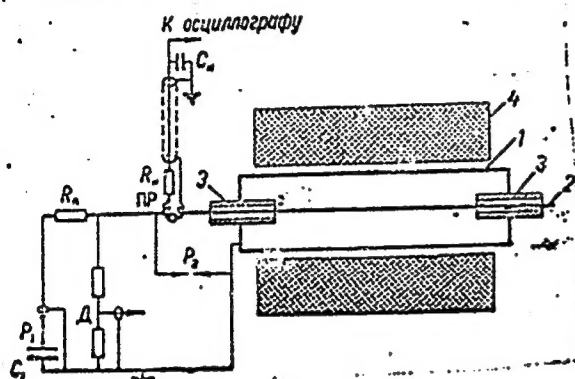
SUB CODE: ME   NR REF SOV: 001   OTHER: 005

Card   3/4

To oscilloscope

К осциллографу

Schematic diagram of installation:
1 - copper vacuum chamber, 2 -
central rod, 3 - porcelain insulator,
4 - solenoid producing a homogeneous
magnetic field, P_1, P_2 - discharge gap
Д - voltage divider, ПР - Rogowski
loop, C_1 - capacitor bank, R_π -
limiting resistor, $R_и$ $C_и$ - integ-
rating network.

Card 4/4

ACCESSION NR: AT4036059   S/2781/63/000/003/0199/0206

AUTHORS: Volkov, Ya. F.; Tolok, V. T.; Krivoruchko, S. M.

TITLE: Plasma of Theta pinch in a magnetic grid

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i prob-lemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis); doklady* konfer-entsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 199-206

TOPIC TAGS: plasma pinch, plasma confinement, magnetic mirror, plasma stability, plasma decay, plasma physics

ABSTRACT: Experiments were set up to ascertain the confining abil-ity of a magnetic grid without a longitudinal field, where the plasma is injected from the ends of the chamber. Another purpose of the experiment was to compare the stability and cleanliness of a

Card 1/5

ACCESSION NR: AT4036059

Θ-pinch plasma with a peripheral field and without it. The experimental setup and the procedure are described. Measurement of the lifetime of the plasma with density above 6×10^{13} cm^{-3}, and of the intensity of the peripheral field B_φ between neighboring conductors at zero longitudinal field, made at a constant pressure of 13.3 n/m^2, has shown that the confinement time increases from 20 to 70 microseconds as the field is increased from 0.5 to 24×10^4 A/m. The existence is proportional to $B_\varphi^{2/3}$. Superposition of the field of the magnetic grid on the Θ pinch apparently decreases the instability; the particles are lost predominantly through the magnetic gaps. The amount of impurity (from the walls) in the discharge decreases with increasing B_φ, and the amount of absorbed hydrogen released from the walls also increases. It is pointed out that the results of these experiments are still preliminary, in view of the small diameter of the chamber and the small values of the magnetic field. Orig. art. has: 6 figures.

Card   2/5

ACCESSION NR: AT4036059

ASSOCIATION: None

SUBMITTED: · 00   DATE ACQ: 21May64   ENCL: 02
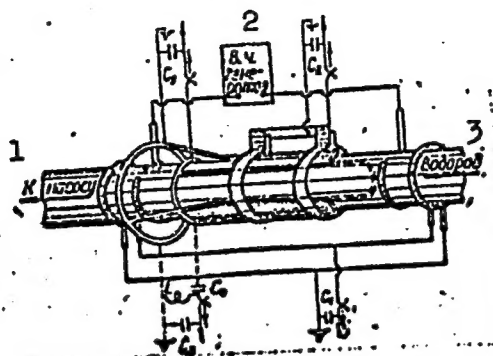
SUB CODE: ME   NR REF SOV: 005   OTHER: 003
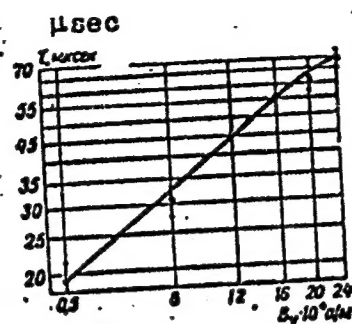
Card   3/5

ACCESSION NR: AT4036059

Theta-pinch plasma in a magnetic field

Card 4/5

Dependence of plasma lifetime on the magnetic field intensity in the gap.

Card 5/5

ACCESSION NR: AT4036061   S/2781/63/000/003/0211/0216

AUTHORS: Il'yenko, B. P.; Zy*kov, V. G.; Lats'ko, Ye. M.; Tolok,
V. T.

TITLE: Measurement of the twist angle and turning angle of a force
line in a system with a helical magnetic field

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo
termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i prob-
lemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and
problems of controlled thermonuclear synthesis); doklady* konfer-
entsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 211-216

TOPIC TAGS: magnetic mirror, plasma confinement, magnetic field,
magnetic pinch, plasma magnetic field interaction, electron beam,
charged particle motion

ABSTRACT: The work described is a continuation of earlier experi-

Card 1/5

ACCESSION NR: AT4036061

ments on the confinement of plasma in traps of the stellarator type
(ZhTF v. 31, 1289, 1961 and v. 32, 1190, 1962). The paper is de-
voted to an experimental investigation of the twist angle and turn-
ing angle in systems with helical magnetic fields, using a vacuum
chamber 9 cm in diameter and 140 cm long (straight copper tube).
The longitudinal magnetic field was produced by 12 single-layer
coils and had a maximum in the axial direction of 3.4×10^4 A/m.
The charged particles were confined in the stellarator by external
magnetic field in which each force line was gradually wrapped around
the axial line of the chamber. The twist angle of the force lines
were measured with the aid of a rotating electron gun, the construc-
tion of which is described elsewhere (ZhETF, v. 32, 1190, 1962).
The measurement results were compared (in an axial magnetic field
3.4×10^4 A/m and at a current of 440 A) with the theoretical formu-
la. The force-line rotation angle was measured on the curved sec-
tion of the stellarator model in a longitudinal magnetic field 7.2 x
$\times 10^4$ A/m and at a current of 1100 A in the coil. The measurements

Card   2/5

ACCESSION NR: AT4036061

have shown that the angular rotation of the beams on the external
side of the curvilinear section is larger than on the external side.
This difference does not affect the motion of the particles in the
closed system, since the average turning angle remains the same and
depends only on the radius.   The measurement results showed satis-
factory agreement with the calculated data.   Orig. art. has: 7
figures and 2 formulas.

ASSOCIATION: None

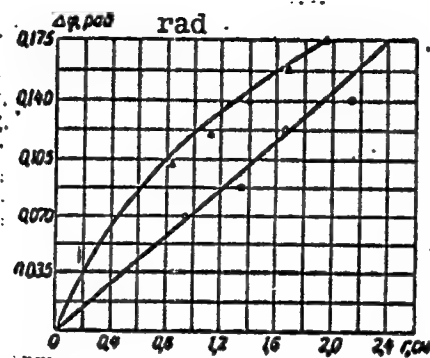SUBMITTED: 00   DATE ACQ: 21May64   ENCL: 02

SUB CODE: ME   NR REF SOV: 004   OTHER: 000
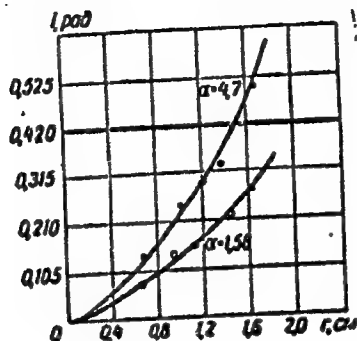
Card   3/5

ACCESSION NR: AT4036061   ENCLOSURE: 03

Dependence of twist angle on the radius

Card 4/5

ACCESSION NR: AT4036061

Dependence of turning angle on the radius

Card   5/5

TOLOKA, V.

Drive for quality. Mashinostroitel' no.3:40-41 Mr '64.
(MIRA 17:4)

TOLOKA, V.I.

        Green light to pneumatic and hydraulic drives. Mashinostroitel'
        no.4:10-11 Ap '63.   (MIRA 16:5)
              (Oil-hydraulic machinery) (Pneumatic machinery)

TOLOKH, S.I. (s.Zhuravno, L'vovskoy oblasti,ul.Shkol'naya,d.4)

Invagination of the jejunum simulating gastric hemorrhage.   Klin.
khir. no.7:77-78 Jl '62.   (MIRA 15:9)

1. Zhuravnovskaya uchastkovaya bol'nitsa, Zhidachevskogo rayona,
L'vovskoy oblasti.
      (GASTROINTESTINAL HEMORRHAGE)(INTESTINES--INTUSSUSCEPTION)

TOLOKH, S.I.

First aid in fractures of the humerus. Fel'd. i akush. 28
no.3:21-24 Mr'63.   (MIRA 16:7)

1. Iz Zhuravenskoy uchastkovoy bol'nitsy Zhidachevskogo rayona
L'vovskoy oblasti.
                    (HUMERUS—FRACTURE)
            (FIRST AID IN ILLNESS AND INJURY)

TOLOKH, S.I.

Instrument set for intraarterial blood transfusion. Vrach.
delo no.12:121 D '63.   (MIRA 17:2)

1. Zhuravenskaya uchastkovaya bol'nitsa Zhidachevskogo
rayona L'vovskoy oblasti.

TOLOKH, S.I. (s.Zhuravno, L'vovskoy oblasti)

"Closed lesions of the spine" by Z.B.Bazilevskaia. Ortop.,
travm. i protez. 24 no. 4:80-83 Ap'63.   (MIRA 16:8)
            (SPINE—WOUNDS AND INJURIES)
            (BAZILEVSKAIA, Z.B.)

TOLOKH, S.I.

Primary suturing of the urethra in pelvic fractures. Klin. khir.
no.1:67-68 '65.   (MIRA 18:8)

1. Zhuravnovskaya uchastkovaya bol'nitsa, Zhidachevskogo rayona,
L'vovskoy oblasti.

TOLOKIYEVA, A. Z.

Cand Med Sci - (diss) "Action of yellow, pontium, and daursk
rhododendrons on the cardiovascular system." Omsk, 1961.
15 pp; (Omsk State Med Inst imeni M. I. Kalinin); 250 copies;
price not given; (KL, 6-61 sup, 241)

TOLOKNEVA, A.Z.; ZVEREVA, A.V.

Pharmacology of Japanese elecampane. Trudy Khab.med.inst. no.20:201-206 '60.
(MIRA 15:10)

1. Iz kafedry farmakologii (zav. dotsent K.V.Drake) Khabarovskogo meditsinskogo instituta.

(ELECAMPANE)

TELESHEV, V.I., inzh.; PINIGIN, M.I., inzh.; TOLOKNO, N.V., inzh.

Passage of the spring ice flow through th- Mamakan Hydroelectric
Power Station. Gidr. stroi. 31 no.7:31-35 Jl '61.
(MIRA 14:7)

(Mamakan Hydroelectric Power Station--Ice on rivers, lakes, etc.)

TOLOKNOV, O.A., kand.tekhn.nauk; NITUSOV, Yu.Ye., kand.tekhn.nauk; REKUS, G.G., kand.tekhn.nauk; CHIRKOV, M.T., inzh.

An a.c.drive system for driving wheels of an automobile train. Izv.vys.ucheb.zav.; mashinostr. no.7:133-136 '63.   (MIRA 16:11)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.

TOLOKNOV, O. A., kand. tekhn. nauk; BOCHAROV, N. F., kand. tekhn. nauk; KRADINOV, Ye. B.; SEMENOV, V. M., kand. tekhn. nauk

Possible use of an electric drive in heavy automobile trains.
Avt. prom. 28 no.6:29-32 Je '62.   (MIRA 16:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche im. Baumana i Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.

(Automobile trains—Electric driving)

ACC NR: AP7006718   (A)   SOURCE CODE: UR/0113/66/000/012/0029/0031

AUTHOR: Baranov, Ye. N.; Bocharov, N. F. (Candidate of technical sciences); Semenov, V. M. (Candidate of technical sciences); Toloknov, O. A. (Candidate of technical sciences); Boshnyak, V. A.; Makarov, S. G.; Boldarev, T. A.

ORG: MVTU im. Bauman; NAMI; Moscow Electric Machine Building Plant (Moskovskiy elektromashinostroitel'nyy zavod)

TITLE: Design of a motorized wheel with electric drive for installation in pneumatic tires on automotive vehicles

SOURCE: Avtomobil'naya promyshlennost', no. 12, 1966, 29-31

TOPIC TAGS: vehicle power transmission system, tire, vehicle engineering, drive train

ABSTRACT: The authors describe a motorized wheel developed in the "wheeled vehicles" department of the Moscow Technical College im. Bauman for installation in the I-245 pneumatic tire. This tire is 1000 mm in diameter and 1000 mm wide with a 305 mm mounting hole. A diagram of the motorized wheel is shown in the figure. The power assembly of the unit is located inside the rim 1 of the tire which is a tube with welded flanges. The power assembly consists of electric motor 2 and speed reducer 3. A DI-33K DC electric traction motor is used with a power of 16 kw at 220 volts. The

UDC: 629.113-585.3

Card 1/3

ACC NR: AP7006718
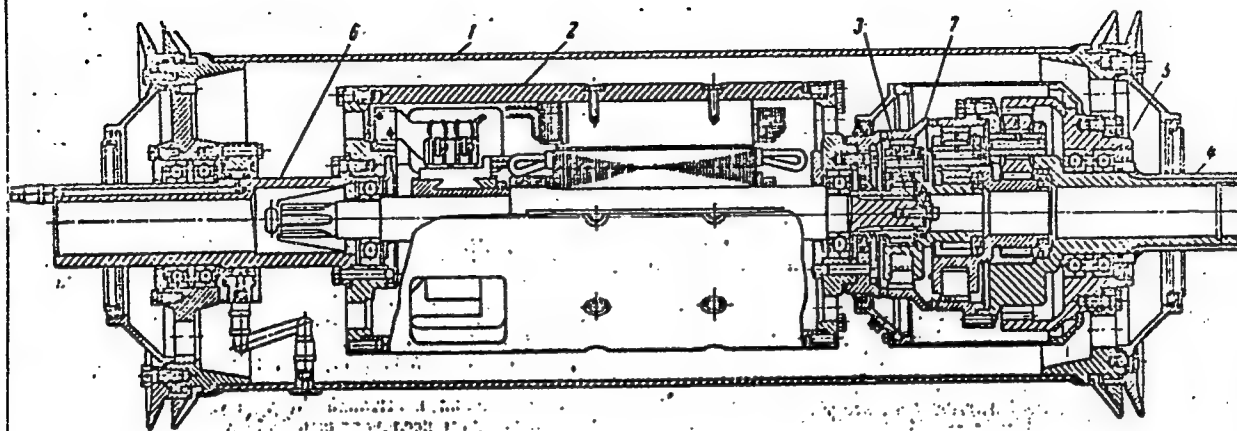
Card 2/3

ACC NR: AP7006718

rated speed of the motor is 4000 rpm with a maximum of 6000 rpm. The unit is 238 mm in diameter and weighs 106 kg. The speed reducer has 3 rows of planetary gears with a transmission ratio of 31.2. This type of speed reducer has the lowest weight and size for a given transmission ratio and efficiency. Orig. art. has: 2 figures, 1 table, 7 formulas.

SUB CODE: 13   / SUBM DATE: None/ ORIG REF: 005

Card   3/3

LAR'KINA, Yekaterina Ivanovna; PETROV, L., red.; TOLOKNOVA, M., mladshiy
red.; ULANOVA, L., tekhn.red.

[Training of collective-farm personnel during the period of mass
collectivization] Podgotovka kolkhoznykh kadrov v period massovoi
kollektivizatsii. Moskva, Izd-vo sots.-ekon.lit-ry, 1960. 165 p.

(MIRA 13:5)

(Collective farms)

ROSTOVTSEV, N.; DOBRYNIN, P.; TIKHOMIROV, V.; LOGACHEV, A.; SHAKUN, V.;
GRUDEV, D.; KUDRYAVTSEV, P.; MALEYEV, M.; SOKOV, N.; KORNIKOV, V.;
TOLOKONNIKOV, A.; PUSTOVALOV, A.; RED'KIN, A.; BLOMKVIST, M.;
PETROV, N.; SHUBSKIY, I.; SEMENOV, S.; POPOV, G.; BRODOV, K.;
KORENEV, P.

Professor M.N. IAkovlev; obituary. Zhivotnovodstvo 19 no.12:90
D '57.   (MIRA 10:12)
            (IAkovlev, Mitrofan Nikolaevich, 1878-1957)

TOLOKOL'NIKOV, G., polkovnik v otstavke

A living participant of a battle. Voen.-znan. 41 no.12:6-7
D '65.   (MIRA 18:12)

TOLOKOL'NIKOV, Grigoriy Abramovich, staryy kommunist, polkovnik zapasa

Lenin has lighted our way. Voen.vest. 39 no.4:23-25 Ap '60.

(MIRA 14:2)

(Lenin, Vladimir Il'ich, 1870-1924)

KEKKELEV, L.; TOLOKONNIKOV, I,

      Notes of a naturalist. IUn.nat. no.5:38-39 My '62. (MIRA 15:7)
             (Birds---Behavior)

TOLOKONNIKOV, I.V. (Moskva)

August in the forest. Priroda 50 no.8:126 Ag '61.   (MIRA 14:7)
                    (Summer)

AZOS, S.; AREF'YEV, A.; ARTAMONOV, I.; BABINA, I.; BEREGOVSKIY, V.; BLOZHKO,V.;
BRAVERMAN, A.; BYKHOVSKIY, Yu.; VINOGRADOVA, M.; GAIANKINA, Ye.;
GIL'DENGERSH, F.; GLOBA, T.; GREYVER, N.; GORDON, G.; GUL'DIN, I.;
GULYAYEVA, Ye.; GUSHCHINA, I.; DAVYDOVSKAYA, Ye.; DAMSKAYA, G.;
DERKACHEV, D.; YEVDOKIMOVA, A.; YEGUNOV, V.; ZABELYSHINSKIY, I.;
ZAYDENBERG, B.; AZMOSHNIKOV, I.; ITKINA, S.; KARCHEVSKIY, V.;
KLUSHIN, D.; KUVINOV, Ye.; KUZNETSOVA, G.; KURSHAKOV, I.;
LAKERNIK, M.; LEYZEROVICH, G.; LISOVSKIY, D.; LOSKUTOV, F.;
MALEVSKIY, Yu.; MASLYANITSKIY, I.; MAYANTS, A.; MILLER, L.;
MITROFANOV, S.; MIKHAYLOV, A.; MYAKINENKOV, I.; NIKITINA, I.;
NOVIN, R.; OGNEV, D.; OL'KHOV, N.; OSIPOVA, T.; OSTRONOV, M.;
PAKHOMOVA, G.; PETKER, S.; PLAKSIN, I.; PLETENEVA, N.; POPOV, V.;
PRESS, Yu.; PROKOF'YEVA, Ye.; PUCHKOV, S.; REZKOVA, F.; RUMYANTSEV,M.;
SAKHAROV, I.; SOBOL', S.; SPIVAKOV, Ya.; STRIGIN, I.; SPIRIDONOVA,V.;
TIMKO, Ya.; TITOV, S.; TROITSKIY, A.; TOLOKONNIKOV, K.; TROFIMOVA, A.;
FEDOROV, V.; CHIZHIKOV, D.; SHEYN, Ya.; YUKHTANOV, D.

Roman Lazarevich Veller; an obituary. TSvet. met. 31 no.5:78-79
My '58.   (MIRA 11:6)
                        (Veller, Roman Lazarevich, 1897-1958)

TOLOKONNIKOVA, Ye.V.

Some morphological and biochemical characteristics of
eggs as related to the age and breed of hens. Trudy
Inst. gen. no.33:109-118 '65.   (MIRA 18:12)

TOLOKH, S. I. (Zhuravno L'vovskoy oblasti)

Fractures of the pelvic bones and first aid. Fel'd. i akush. 27
no.5:18-20 My '62.   (MIRA 15:7)

(FIRST AID IN ILLNESS AND INJURY)
(PELVIS—FRACTURE)

Country : USSR
Category: Pharmacology. Toxicology. Medicinal Plants.   V

Abs Jour: RZhBiol., No 6, 1959, No 27863

Author   : Drake, K.V.; Kiryutina, V.I.; Zvereva, A.V.;
           Tolokneva, A.Z.
Inst   : Khabarovsk Medical Institute
Title   : On the Pharmacology of Laminaria.

Orig Pub: Tr. Khabarovskoge med. in-ta, 1957, sb. 15, 78-83

Abstract: Infusions and tinctures of Japanese Laminaria (I)
          in dilutions of 1:30 - 1 : 200 increase the contrac-
          tions of isolated intestine of rabbit. I removes
          the paralyzing action of atropine and adrenalin
          on the intestines, but does not remove the effect
          of papaverine. In subcutaneous and intravenous

Card   : 1/2

Country : USSR
Category: Pharmacology. Toxicology. Medicinal Plants.   V

Abs Jour: RZhBiol., No 6, 1959, No 27863

    introduction, I decreases arterial pressure. I
    increases the amplitude of cardiac contractions
    and dilates the vessels of isolated ear of rabbit.
    From the author's resume.

Card   : 2/2

V-45
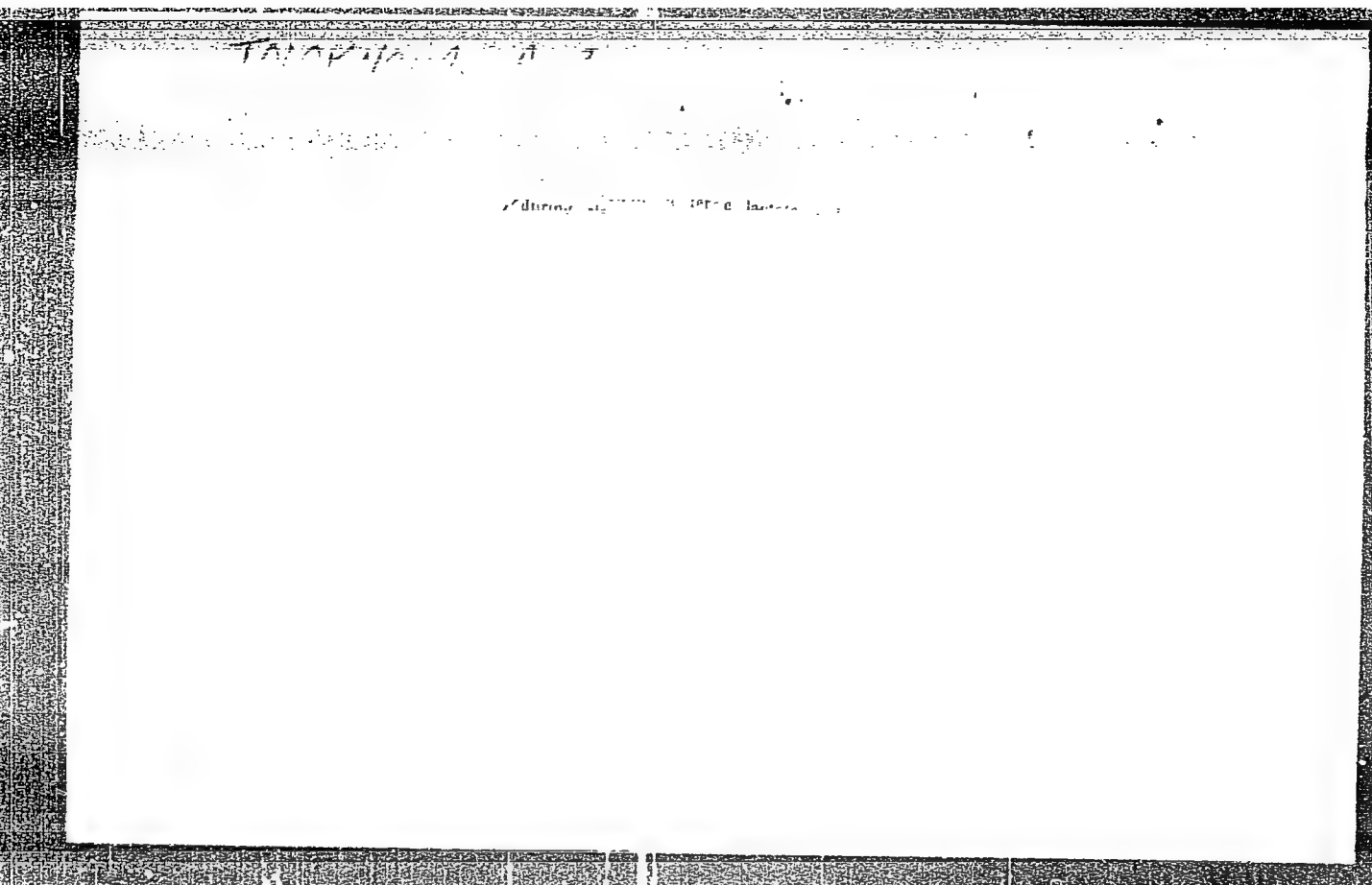
TOLOKNEVA, A.Z.

Effect of various species of Rhododendron on the heart. Farm.
i toks. 19 no.1:39-45 Ja-F '56.   (MLRA 9:5)

1. Kafedra farmakologii (zav.-dotsent K.V. Drake) Khabarovskogo
medistinskogo instituta i otdel farmakologii (zav.-prof. A.D.
Turova) Vsesoyuznogo nauchno-issledovatel'skogo instituta lekarstvennykh
i aromaticheskikh rasteniy.
        (CARDIAC GLYCOSIDES,
            Rhododendron (Rus))

TOLOKNEVA, A.Z.

Effect of Rhododendron preparations on experimental cardiovascular
insufficiency in dogs. Farm.i toks. 23 no.1:42-45 Ja-F '60.
(MIRA 14:3)
1. Kafedra farmakologii (zav.-dotsent K.V.Drake) Khabarovskogo gosudar-
stvennogo meditsinskogo instituta.
(CARDIOVASCULAR SYSTEM—DISEASES)   (RHODODENDRON)

TOLOKNO, A.F.

579   Otkorm sviney v kolkhoze Shlyakh do komunizmun. /Borispol'skiy rayon
      Kievskoy obl./ M., Goskul'tirosuetizdat, 1954. 16 s. s ill. 22sm.
!   (Vsesoyue. s.-kh Vystavka). 5.000 ekz. 15k. -Na dol avt. ne
      ykazan- /54.54693/p   636.4084st (47.711)

      SO: Knizhnaya Letopis, Vol. 1, 1955

TOLOKNOV, L.M.

General-use instruments with a scale angle of 240°. Inform.-tekh.
sbor. MEP no.8:40-48 '58.   (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektropromyshlennosti.
                    (Electric meters)

TOLOKNOV, N.

Moving-picture Projectors

Improve the inspection and assembly of equipment.   Kinomekhanik no. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, _____ May _____ 1953, Uncl.

TOLOKNOV, O.A., kand. tekhn. nauk; REKUS, G.G., kand. tekhn. nauk;
        CHIRKOV, M.T., inzh.

        Gas-turbine a.c. traction drive system. Elektrotekhnika 34
        no.11:44-49 N '63.   (MIRA 17:2)

8(5)

AUTHORS: Toloknov, O.A., Chirkov, M.T., and Yerokhin, I.A.

TITLE: A Generator – Motor System With Magnetic Amplifiers

ABSTRACT: For a number of production devices it is desireable
             to have an electric drive with an even wide control
             range. The generator-motor system satisfies this
             requirement. However, the normal generator-motor
             system does not provide different mechanical charac-
             teristics. This may be obtained by a complicated
             and uneconomical addition of auxiliary motors and
             devices. The generator-motor system suggested by the
             authors provides a wide and even range of rpm control
             for different mechanical characteristics. Prior to
             considering the generator – motor system with a mag-
             netic amplifier, the authors point out some peculiar-
             ities of generator-motor systems with series excita-
             tion. They mention the complicated equipment required
Card 1/3   and that continuous motor speed control is of the

A Generator – Motor System With Magnetic Amplifiers   SOV/159-58-3-9/31

order 1:10 by reducing the magnetic current in the motor and in the generator. Further, they point out the disadvantages of such a system. For eliminating these disadvantages and for providing a control range of 1:50, the authors suggest a generator-motor system with a magnetic amplifier as shown in figure 2. In a generator-motor system, having series excitation, residual magnetism currents are of great influence at loads close to zero. These residual magnetism currents are compensated in the system suggested by the authors. The suggested generator-motor system with a magnetic amplifier was tested on a low-power machine PI-45, operating at 110 volts, 28.2 amps, 2.5 kw, 1,000 rpm. The application of magnetic amplifiers provides the possibility obtaining dif-ferent mechanical characteristics and regulating the motor speed by means of potentiometers. There are

Card 2/3

A Generator - Motor System With Magnetic Amplifiers

SOV/159-58-3-9/31

        1 circuit diagram, 5 graphs and 4 Soviet references.
This article was presented by the
Kafedra "Elektrotekhnika i elektrooborudovaniye"
Moskovskogo vysshego tekhnicheskogo uchilishcha imeni
Baumana (Chair "Electrical Engineering and Electrical
Equipment" of the Moscow Higher Technical School imeni
Bauman;

SUBMITTED: March 13, 1958

Card 3/3

ACC NR: AP6035649   SOURCE CODE: UR/0280/66/000/005/0149/0152

AUTHOR: Toloknov, V. I. (Moscow)

ORG: none

TITLE: One problem in the analytical design of an optimal regulator

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 5, 1966, 149-152

TOPIC TAGS: automatic control theory, optimal control, control system stability

ABSTRACT: The solution of the problem concerning the analytical design of an optimal regulator in closed form is considered. Equations are presented for computing the parameters of the optimum control law and of the weighting coefficients of a quadratic functional according to data on the parameters of the system, the initial perturbations and the properties of the desired transient process. The stationary linear system whose motions satisfies the following differential equations is considered:

$$\dot{\eta_1} = \eta_2,$$
$$\dot{\eta_2} = b_{21}\eta_1 + b_{22}\eta_2 + m\xi,$$
$$\dot{\xi} = h\sigma.$$

In the above, $\eta = \eta_1$ and η_2 are phase coordinates which determine the state of the sys-

Card 1/2

ACC NR: AP6035649

tem; b_{21}, b_{22} and m are known coefficients which characterize the system; ξ is the co-ordinate of the control organ; $h > 0$ is an assigned number which characterizes the slope of the servomotor speed characteristic; σ is the control signal fed to the servo-motor. Within certain specified limitations, a control law is selected such that there is asymptotic stability in the closed system with respect to initial perturbations and such that the function now assumes a minimum value during all motions of the system. The Lyapunov-Bellman method is used to obtain the control law. The control law together with the initial equation are used to formulate a differential equation for the closed control system with respect to the coordinate η_1. The minimum value of the functional is computed from the weighting coefficients. The determination of the weighting coefficients is reduced to a special algebraic problem. Orig. art. has: 32 formulas.

SUB CODE: 12, 13, 14/   SUBM DATE: 06Feb65/   ORIG REF: 002

Card 2/2

TOLOKOL'NIKOV, G., gvardii polkovnik zapasa

       General Dovator; on his 60th birthday. Voen. znam. 39 no.3:8
       Mr '63.   (MIRA 16:7)
               (Dovator, Lev Mikhailovich, 1903-)

TOLOKNOVA, Ye. A., Cand of Med Sci -- (diss) "Investigation of the contents of hormones of the ▮▮▮▮▮ cortex of the suprrenal glands during the treatment of patients suffering with a cardial form of rheumatism." Moscow, 1957, 11 pp (Institute of Therapy, Academy of Medical Sciences USSR), 200 copies (KL, 32-57, 98)

FOTEYEVA, M.N.; SUL'YE, Ye.V.; TOLOKNOVA, Ye.A.; NESTEROVA, A.P.; MYASNIKOV, A.L., professor, deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR, direktor.

Rate of blood flow in hypertension determined with radioactive sodium.
Terap.arkh. 25 no.3:7-14 My-Je '53.   (MLRA 6:9)

1. Institut terapii Akademii meditsinskikh nauk SSSR.
              (Hypertension) (Radioactive tracers)

TOLOKNOVA, Ye.A.

Investigations on adrenal cortex hormones in rheumatic heart
disease and their relation to hormone therapy. Terap. arkh. 27
no.8:68-73 '55.   (MLRA 9:5)

1. Iz Instituta terapii (dir.-deystvitel'nyy chlen AMN SSSR prof.
A.L. Myasnikov) Akademii meditsinskikh nauk SSSR.
        (RHEUMATIC HEART DISEASE, therapy,
            ACTH, eff. on blood & urine adrenal cortex hormones)
        (BLOOD
            adrenal cortex hormones, eff. of ACTH in ther. of
            rheum. heart dis.)
        (ACTH, therapeutic use,
            rheum. heart dis., eff. on blood & urine adrenal cortex
            hormones)
        (URINE
            adrenal cortex hormones, eff. of ACTH in ther. of rheum.
            heart dis.)
        (ADRENAL CORTEX, hormones,
            in blood & urine, eff. of ACTH ther. of rheum. heart
            dis.)

TOLOKONNIKOV, B.P., inzh.

Introduced in the Yaroslavl Economic Region. Izobr. v SSSR 3 no.3:
15-16 Mr '58.   (MIRA 11:3)
          (Yaroslavl Province--Efficiency, Industrial)

TOLOKONNIKOV, B.V., prof.

Mechanism of pupil reaction to a sound stimulus. Trudy gos.
nauch.-issl.inst.ukha, gorla i nosa. 6:251-261 '55.
(MIRA 12:10)

1. Iz otdela fiziologii (zav. - prof. N.V.Timofeyev) Gosudár-
stvennogo nauchno-issledovatel'skogo instituta ukha, gorla i
nosa.

(PUPIL (EYE)) (SOUND--PHYSIOLOGICAL EFFECT)

TOLOKONNIKOV, B.V.; UR'YEVA, F.I.

Vestibular disorders in hardness of hearing. Trudy gos.
nauch.-issl. inst. ukha, gorla i nosa no.11:269-274 '59.
(MIRA 15:6)

1. Iz otdela patofiziologii Gosudarstvennogo nauchno-
issledovatel'skogo instituta ukha, gorla i nosa.
(DEAFNESS)   (VESTIBULAR APPARATUS)   (VERTIGO)

5

TOLOKONNIKOV, B.V.   (Deceased)

Physiology

See ILC

TOLOKOL'NIKOV, G., polkovnik zapasa

     In the "Sports and Technology" defense organization. Voen. znan.
35 no.11:12 N '59.   (MIRA 12:12)
       (Germany, East--Military education)

TOLOKOL'NIKOV, G.

National here. Voen.znan. 32 no.1:27 Ja '56.   (MLRA 9:5)
            (Parkhomenko, Aleksandr Iakovlevich, 1885-1921)

TOLOKOL'NIKOV, G., g. Krasnogorsk Moskovskoy oblasti.

First successes. Voen.znan.31 no.7:8 Jl'55. (MLRA 8:12)
(Krasnogorsk--Military education)

TOLOKONNIKOV, I.

Recent settlers. IUn.nat. no.4:24-25 Ap '60.
(MIRA 13:6)

(Wild life, Conservation of)

TOLOKONNIKOV, L.A.   CAND PHYSICOMATH SCI

Dissertation: "Concerning the Influence of Material Compressibility on the Stability
                of Plates and Shells Beyond the Limit of Elasticity."

23 June 49
    Sci Res Inst of Mechanics, Moscow Order of Lenin State V imeni M.V. Lomonosov.

SO Vecheryaya Moskva
Sum 71

TOLOKONNIKOV, L. A.

USSR/Mathematics - Nonlinear elasticity theory   FD-954

Card 1/1   Pub 85-8/11

Author   : Tolokonnikov, L. A. (Rostov)

Title   : Finite symmetrical deformations of a strip

Periodical : Prikl. mat. i mekh. 18, 619-626, Sep/Oct 1954

Abstract   : Symmetrical deformation of a strip bounded by circular arcs and
               sections of radii is analyzed. The external forces are assumed
               at constant direction to the radial and tangential stresses in
               each point of the strip. The geometrical conditions of joint de-
               formation and the equilibrium equation are reduced to a single
               differential equation in which the stress components are the de-
               sired function and argument. As an example, a problem of the two-
               dimensional stress of a plate is solved. One reference.

Institution : --

Submitted   : January 26, 1954
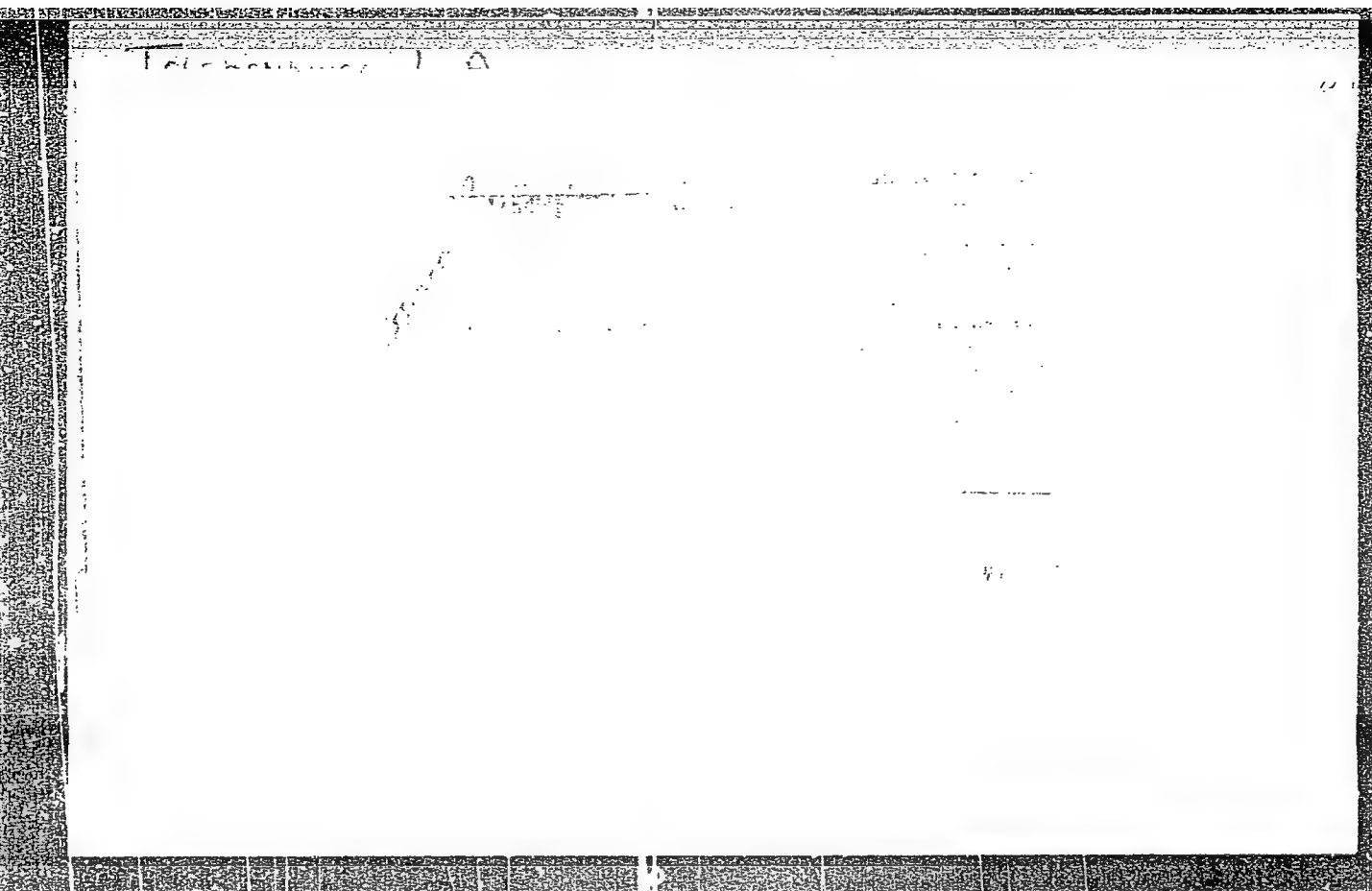
TOLOKONNIKOV, L. A.

GROMOV, V.G. (Tula); TOLOKONNIKOV, L.A. (Tula)

Calculation of approximations in the problem of finite plane deformations of a noncompressible material. Izv. AN SSSR Otd. tekh. nauk. Mekh. i mashinostr. no.2:81-86 Mr-Ap '63.

(MIRA 16:6)

(Deformations(Mechanics))

TOLOKONNIKOV, L.A.

Some properties of correlations in the nonlinear theory of
elasticity. Nauch.trudy Tul.gor.inst. no.3:3-27 '61.

(MIRA 16:4)

(Elasticity)

TOLOKONNIKOV, L.A.

Variational equation for the problem of stability in a state of
equilibrium. Nauch.trudy Tul.gor.inst. no.3:27-37 '61.

(MIRA 16:4)

(Calculus of variations)
(Deformations (Mechanics))

TOLOKONNIKOV, L.A.

Significant deformations of an axisymmetric shell. Nauch.trudy
Tul.gor.inst. no.3:38-44 '61.
(Deformations (Mechanics))   (MIRA 16:4)

To Lokonnikov, L.A.

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan – 3 Feb '60.

TOLOKONNIKOV, L. A.: Doc Phys-Math Sci (diss) -- "Some problems in the nonlinear thoery of elasticity". Tula, 1958. 10 pp (Min Higher Educ USSR, Tula Mining Inst) (KL, No 13, 1959, 99)

TOLOKONNIKOV, L.A. (Tula).

Critical pressures on circular plates. Izv. AN SSSR. Otd. tekh. nauk no.10:77-86 0 '58.

(Elastic plates and shells)   (MIRA 11:12)

TOLOKONNIKOV, L.A. (Tula)

Finite plane deformations of an incompressible material. Prikl.
mat. i mekh. 23 no.1:146-158 Ja-F '59.   (MIRA 12:2)
                    (Deformations (Mechanics))

AUTHOR: Tolokonníkov, L. A.   20-119-6-19/56

TITLE: Plane Deformation of an Incompressible Material
             (Ploskaya deformatsiya neszhimayemogo materiala)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6,
             pp. 1124-1126 (USSR)

ABSTRACT: The position of the points of the body in its natural
             state are determined by the Cartesian coordinates
             x_1, x_2, x_3. Let the displacement vector of the particle
             consist of the components $u_1(x_1, x_2)$ $u_2(x_1, x_2)$, $u_3 = 0$.
             Then it is possible to determine the deformation state of
             the surroundings of the point by the components of the
             tensor $((\varepsilon_{ik}))$ and of the vector $\vec{\omega}$, of which only

             ε_{11}, ε_{22}, ε_{12} and ω_3 can differ from zero. At first
             equations for the rotation in the vicinity of the point
             are given. Then expressions are derived for the phase and
             the intensity of deformation. The compatibility conditions
Card 1/3   for the displacements reduce to a here given

Plane Deformation of an Incompressible Material   20-119-6-19/56

Card 2/3

system of equations. The non-linear equations for the
equilibrium are written down in a generalized stresses,
which are expressed by a hydrostatic σ and an octahedral
tangential τ. The author assumes the following: the body
is isotropic, the principal directions of the stresses and
of the deformations coincide, the phases of the true stresses
of the logarithmic elongations are equal to one another and
the intensity of the deformations is a unique function
known from experiments of the octahedral tangential stresses
only. Then the equations for the equilibrium in the absence
of mass forces are satisfied by the introduction of a
stress function. The equation of this problem resulting
under these assumptions is written down explicitly, it is,
by the way, comparatively long. At a transition to the
relations of classical elasticity theory this equation
reduces to a biharmonic equation. Finally a boundary
condition is deduced, and the special case of final
dimensions in non-ferrous metals is also taken into
consideration. It is eventually possible to represent the
solution of the problem by a series expansion with respect
to a small parameter μ:

Plane Deformation of an Incompressible Material   20-119-6-19/56

$U = U^{(o)} + \mu U^{(1)} + \mu^2 U^{(2)} + \dots$. The determination of $U^{(o)}$ is equivalent to the solution of the classical problem. The computation of each of the subsequent approximations reduces to the solution of problems of the type $\nabla^4 U^{(1)} = - L_1(U^o)$, $dU^{(1)}_{,1}/ds|_\Gamma = f_1(U^o)$, $dU^{(1)}_{,2}/ds = f_2(U^o)$. Therefore it is possible to employ successfully the method developed by N. I. Muskhelishvili for the solution of actual problems. There are 4 references, 3 of which are Soviet.

PRESENTED: December 25, 1957, by L. I. Sedov, Member, Academy of
               Sciences, USSR

SUBMITTED: December 11, 1957

Card 3/3

AUTHOR: Tolokonnikov, L. A. (Tula)

TITLE: Critical Pressures on a Circular Plate (Kriticheskiye davleniya na krugluyu plastinku)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 10, pp 77-86 (USSR)

ABSTRACT: Axially symmetrical equilibrium states of a circular disc of radius a and thickness h under the action of a uniform pressure (2) on the cylindrical surface are considered. The method of holding the disc in position is illustrated in Fig.1. Experiments show that sufficiently thin plates will bulge if the pressure reaches a certain critical value and the median surface of the disc assumes the form of a surface of revolution. This bulging effect may be prevented by increasing the thickness of the disc. There is a limiting value for the ratio h/a, above which the disc will remain plane at any pressure. On the basis of the classical theory of stability of elastic plates, Dinnik (Ref.1) showed that the ratio h/a is related to the critical pressure by the following formula:

$$\left(\frac{h}{a}\right)^2 = \frac{6(1-\mu)}{d^2}\frac{q}{G} \qquad , \qquad (1.1)$$

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Critical Pressures on a Circular Plate

where μ is Poisson's coefficient, G is the modulus of rigidity, and d is the first non-zero root of the first-order Bessel function. This formula is applicable up to the elastic limit and is based on the small deformation approxi-mation. Various suggestions have been put forward for ex-tending the above formula to the elasto-plastic state. These reduce to a replacement of G by G' , which is a function of pressure and decreases as the pressure increases. Hence, the extension of Eq.(1.1) to the region of elasto-plastic deformations is represented by a monotonic function. Thus, the determination of the limiting ratio h/a , above which the disc is always stable, cannot be carried out within the limits of the theory of small deformations. In the present paper, a general solution is given which is not limited to small deformations. The equilibrium of a continuous body is considered in general. Two possible states are defined, the "fundamental" and the "possible". On the basis of the La-grange theory, the fundamental state is described by the

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Critical Pressures on a Circular Plate

displacements $u_s^o((x_k))$, non-linear deformations e_{mn}^o and the tensor components of generalised stresses Σ_{mn}^o .

The non-linear components of the deformation tensor are represented as sums of linear e_{mn}^o and non-linear $\ni_{mn}^o$ parts:

$$e_{mn}^o = \varepsilon_{mn}^o + \vartheta_{mn}^o , \quad 2\varepsilon_{mn}^o = \frac{\partial u_m^o}{\partial x_n} + \frac{\partial u_n^o}{\partial x_m} \quad ,$$

$$2\vartheta_{mn}^o = \frac{\partial u_s^o}{\partial x_m} \frac{\partial u_s^o}{dx_n} \quad . \tag{2.1}$$

It can be shown that the generalised stresses corresponding to the deformation coordinates e_{mn}^o are given by:

$$\Sigma_{mn}^o = \frac{s_m^o s_n^o}{1 + \Delta^o} \sigma_{mn}^o \quad , \tag{2.2}$$

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SOV/24-58-10-12/34

Critical Pressures on a Circular Plate

where Δ^0 is the relative change in the volume element of the body on deformation, s_k^0 is the ratio of areas of coordinate area elements in the deformed and natural states and σ_{mn}^0 are the contravariant components of the tensor of true stresses relative to the triad of coordinate lines in the deformed state. If the points of the body are given the displacements $u_k = \tilde{u}'_k - u_k^0$, then the body goes from the fundamental to the possible equilibrium state. The changes in the generalised stresses are then $\sum_{mn} = \tilde{\sum}_{mn} - \sum_{mn}^0$ and from the displacements u_s and formulae (2,1), the quantities e_{mn} may be calculated. The equation of equilibrium for the fundamental state is: .

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Critical Pressures on a Circular Plate

$$\int_{(T)} \sum_{mn} \delta \overset{o}{e}_{mn} \, d\tau = \int_{(T)} \rho \overset{o}{X}_i \delta \overset{o}{u}_i \, d\tau + \int_{(S)} \overset{o}{X}_{vi} \delta \overset{o}{u}_i ds \quad , \qquad (2.3)$$

where ρ is the density, $\overset{o}{X}_i$ and $\overset{o}{X}_{vi}$ are the projections of volume and surface forces per unit volume or unit surface in the natural state. The integration is carried out over the volume of the body or its surface in the natural state. An analogous equation may be written down for the parameters of the statically possible state. In view of Eq.(2.3), the variational equation of equilibrium for the possible state may be written in the form:

$$\int_{(T)} \sum_{mn} \delta \varepsilon_{mn} d\tau + \int_{(T)} \overset{o}{\sum_{mn}} \delta \mathfrak{Z}_{mn} d\tau + \frac{1}{2} \int_{(T)} \sum_{mn} \left(\frac{\partial \overset{o}{u}_s}{\partial x_m} \frac{\partial \delta u_s}{\partial x_n} \right. +$$

Card 5/7

Critical Pressures on a Circular Plate

$$+ \frac{\partial u_s^{\,o}}{\partial x_n} \; \frac{\partial \delta u_s}{\partial x_m} \Bigg) \, d\tau = 0 \qquad . \qquad\qquad (2.4)$$

The first term on the left-hand side of this equation is the work done by stresses of linear parts of the deformation and the second term is the work done by the stresses of the fundamental state on non-linear parts of the deformation. The third term represents additional work by the stresses. On the basis of this formalism, the following are treated:
1) the fundamental equilibrium state of the disc,
2) the relation between the stresses and the deformation,
3) the relation between the stresses and the deformation resulting on loss of stability,
4) displacements and deformations on loss of stability,
5) bulging of the disc from the elastic state,
6) critical pressures with elasto-plastic deformations.

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Critical Pressures on a Circular Plate

Fig.2 shows the plot of $(h/a)^2$ as a function of q/G. According to Dinnik's formula (Eq.1.1), this plot should be a straight line. In fact, according to the present calculations, one obtains a curve which rises up to a maximum and then turns over. The corresponding relation now derived for h/a as a function of the critical pressure is given by Eq.(8.2). In the case of elasto-plastic deformations, the corresponding curve is shown in Fig.4. Up to a certain value the curve follows the same law as that in Fig.2 (Eq.8.2). Above that value Eq.(9.14) has to be employed. There are 4 figures and 5 Soviet references.

SUBMITTED: November 9, 1956.

Card 7/7

TOLOKONNIKOV, L.A.

Plane deformation of an incompressible material. Dokl. AN SSSR 119
no.6:1124-1126 Ap '58.   (MIRA 11:6)

1. Predstavleno akademikom L.I. Sedovym.
                        (Deformations (Mechanics))

AUTHOR: Tolokonnikov, L.A. (Tula)   40-21-6-10/13

TITLE: Theory of Electricity/the Non-Linear Strength Mechanics of Displacements (Uravneniya nelineynoy teorii uprugosti v peremeshcheniyakh)

ABSTRACT: By application of the deformation parameters which are com-
posed of the derivatives of the single displacements into
the directions of the coordinates, the author derives the
basic equations of elasticity theory. He shows that, if the
main deformations are known, the state of deformation of the
body depends on three algebraic invariants derived from the
deformation parameters. For the value of these invariants
conclusions can be drawn from experiments. Their calculation
can be carried out by application of the condition for the
existence of a potential of the internal forces. The analy-
tic form, however, essentially depends on the choice of the
independent coordinates of deformation. Now experiments show
that the volume deformation mainly depends on the hydrosta-
tic pressure. The state of stress, however, essentially de-

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in
Theory of Electricity the Non-Linear Strength Mechanics of Displacements   40-21-6-10/18

pends on the state of deformation. This fact can be applied
to a uniformization of the analytic representation. It is
shown that these considerations can be essentially main-
tained, if the considered material is incompressible and, if
the state of the body is given in each point by the coordi-
nates of the deformation and by the hydrostatic stress.
There are 7 references, 6 of which are Soviet and 1 American.

SUBMITTED: February 13, 1957
AVAILABLE: Library of Congress

1. Elasticity-Theory

Card 2/2

TOLOKONNIKOV, L.S.

Exhibition of the works of the All-Union Research Institute of
Medical Instruments and Equipment. Sov. zdrav. 20 no.8:90 '61.
(MIRA 15:1)
(MEDICAL INSTRUMENTS AND APPARATUS—EXHIBITIONS)

TOLOKONNIKOV, Leonid Stepanovich; TSishevskiy, V.P., red.; VORONIN, K.P.,
    tekhn. red.

[Calculation and design of electric furnace components]. Raschet i
konstruirovanie mekhanizmov elektricheskikh pechei. Moskva, Gos.
energ. izd-vo 1961.   238 p.   (MIRA 14:8)
                    (Electric furnaces)

Tolokonnikov, Leonid Stepanovich, Mikhail Mikhaylovich Sokolov, Abram Solomonovich
Sandler, Vladimir Ivanovich Klyuchev, Yevgeniye Petrovich Ivanov, and Yevgeniy
Nikolayevich Zimin

Atlas elektromekhanicheskikh promyshlennykh ustanovok, ch. 1. Elektroprivod i
peredatochnyye mekhanizmy (Atlas of Electromechanical Industrial Installations,
Pt. 1. Electric Drive and Transmission Mechanisms) Moscow, Gosenergoizdat,
1958. 140 p. 6,500 copies printed.

Chief Ed.: M.G. Chilikin; Eds. (Title page): A.T. Golovan and Leonid Stepanovich
Tolokonnikov; Ed. (Inside book): A.L. Saparova; Tech. Ed.: N.I. Borunov.

PURPOSE: The atlas is intended as a manual for students working on machine parts
projects and on term and diploma projects related to electrical equipment for
drives.

COVERAGE: The atlas presents electromechanical installations for driving, hoisting,
and transporting mechanisms (cranes, excavators, hoists, conveyers), rolling
mills (continuous rolling mills), metal forming equipment, metal-cutting machine
tools and automatic transfer lines. Drawings of general views of mechanisms and
drives with the distribution of electrical equipment, elementary circuits and

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Atlas of Electromechanical Industrial Installations (Cont.)   SOV/2347

wiring diagrams with the ncessary explanations are presented. The mechanical
and electrical parts of every mechanism or device are closely related in the
manual to enable joint treatment of the sugject and to improve the level of
preparation for design. In compiling the atlas most recent design material
of the following institutions was used: scientific research institutes
VNIIPTMASh, TsKB "Elektroprivod," TsNIITMASh, NIIProdmash, PKO "Soyuzprom-
mekhanizatsiya," GPI, Tyazhpromelektroproyekt, Institutes MEI and MISI; and
Plants "Dinemo" and "Pod"yemnik." No personalities are mentioned. There are
28 references, all Soviet.

TABLE OF CONTENTS:

PART I. HOISTING AND TRANSPORTING MECHANISMS

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PART II. METALLURGICAL AND PRESS FORGING EQUIPMENT

Foreword

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Atlas of Electromechanical Industrial Installations (Cont.)   SOV/2347

PART III. METAL-CUTTING MACHINE TOOLS

Foreword   107

AVAILABLE: Library of Congress (TJ 240. A8)

GO/sfm
10-20-59

Card 4/4

TOLOKONNIKOV, Leonid Stepanovich; KATSEVICH, Leonid Savvich; NEKRASOVA,
Nina Mikhaylovna; IVANOV, Yevgeniy Petrovich; CHILIKIN, M.G.,
glavnyy red.; SVENCHANSKIY, A.D., red.; SAPAROVA, A.L., red.;
BORUNOV, N.I., tekhn.red.

[Atlas of electromechanical industrial installations] Atlas
elektromekhanicheskikh promyshlennykh ustanovok. Moskva, Gos.
energ.izd-vo. Part 2. [Electric furnaces] Elektricheskie
pechi. Glav.red. M.G.Chilikin. Red. A.D.Svenchanskii i L.S.
Tolokonnikov. 1959. 7 p., 107 diagrs.   (MIRA 12:8)
                    (Electric furnaces)

TOLOKONNIKOV, Leonid Stepanovich; SOKOLOV, Mikhail Mikhaylovich; SANDLER,
Abram Solomonovich; PETUCHEV, Vladimir Ivanovich; IVANOV,
Yevgeniy Petrovich; ZIMIN, Yevgeniy Nikolayevich; CHILIKIN, M.G.,
glavnyy red.; GOLOVAN, A.T., red.; SAPAROVA, A.L., red.; BORUNOV,
N.I., tekhn.red.

[Atlas of electromechanical industrial units] Atlas elektromekha-
nicheskikh promyshlennykh ustanovok. Pt.1 [Electric drives and
transmission] Elektroprivod i peredatochnye mekhanizmy. Red.
M.G.Chilikin. Moskva, Gos. energ. izd-vo. 1958. 139 p.
     (Electric driving)   (Gearing)   (MIRA 12:2)

TOLOKONNIKOV, L. S.,Engineer   Cand. Tech. Sci.

Dissertation: "Theory and Calculation of Shoe Brakes by the Graphical Method."

10 Jun. 49

Moscow Automotive Mechanics Inst.

SO Vecheryaya Moskva
Sum 71

SHUMILOVSKIY, N.N., doktor tekhn.nauk; GUSHCHIN, Yu.V., inzh.; TOLOKONNIKOV, M.I., inzh.

Using radioactive radiation in automatic control of the flow of liquids in closed piping. Izv.vys.ucheb.zav.; prib. no.1:132-138 '59.
(MIRA 12:11)

1. Moskovskiy ordena Lenina energeticheskiy institut.
(Flowmeters)   (Radioisotopes--Industrial applications)

RYBAKOV, B.V. Prinimali uchastiye: TOLOKONNIKOV, M.I.; BASHMACHNIKOV,
S.I.; SMIRNOV, A.K.; KHOMUTOV, A.I.; SHAMANINA, V.I.; SHIBAYEV,
Z.K. BABAKOV, N.A., doktor tekhn.nauk, red.; MAZALOV, N.D.,
kand.tekhn.nauk, red.; SOBOLEVA, N.M., tekhn.red.

[Automatic and remote control in the national economy] Avtomatika
i telemekhanika v narodnom khoziaistve. Pod red. N.A.Babakova i
N.D.Mazalova. Moskva, Vses.in-t nauchn.itekhn.informatsii, 1960.
226 p.   (MIRA 13:10)
        (Automatic control)   (Remote control)